

# CDC *in* RWANDA



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The Centers for Disease Control and Prevention (CDC) established an office in Rwanda in 2002 to support HIV/AIDS prevention and control through the Global Aids Program and later through the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). CDC's support expanded in 2007 under the U.S. President's Malaria Initiative (PMI). CDC continues to work with the government of Rwanda to build laboratory and workforce capacity, support health systems strengthening for HIV and tuberculosis, and leverage existing resources to respond to the COVID-19 pandemic and other emerging health threats.



Since 2018, CDC supports the National Reference Laboratory (NRL) to establish local diagnostic capabilities for Ebola and other viral hemorrhagic fevers



After achieving medical laboratory accreditation (ISO15189:2012) in 2020, Rwanda's NRL leads local efforts to advance quality management systems throughout the laboratory network



CDC supported Rwanda to leverage existing resources and systems to build a strong workforce and efficiently roll-out COVID-19 vaccines, national community-level diagnostic testing plans, and clinical care protocols



As of July 2022, 64 trainees from six cohorts graduated from Rwanda's Advanced Field Epidemiology Training Program (FETP)



More than 80% of FETP-Advanced graduates work at government institutions



Since 2010, FETP residents led and supported more than 60 outbreak responses, including COVID-19, measles, cholera, malaria, epidemic typhus fever, Rift Valley fever, typhoid fever, and gastroenteritis



More than 106,200 (52%) of adults and children living with HIV in Rwanda receive antiretroviral treatment (ART) through PEPFAR



Rwanda's national ART coverage is 92.4%, treatment retention is 92.3%, and overall viral load suppression is 91%



Due to prevention of mother-to-child transmission, 98.5% of infants born to mothers living with HIV do not have HIV at 2 years of age



Cases of malaria in Rwanda decreased substantially from 4.8 million cases in 2016 to 1.2 million cases in 2021. Malaria incidence also decreased by 79% between 2016 and 2021



Severe malaria cases decreased from 18,000 cases in 2016 to less than 2,000 cases in 2021. Deaths due to malaria also decreased from 715 in 2016 to 69 in 2021



CDC's support led to expansion of community-based malaria case management (diagnosis and treatment). The percentage of cases treated at the community level increased from 13% in 2016 to 57% in 2021

## Global Health Security

Countries with strong public health systems can quickly prevent, detect, and respond to infectious disease threats before they become epidemics. Rwanda began participating in the Global Health Security Agenda (GHSA) in 2015. CDC supports the Ministry of Health (MOH) with strategic planning, national outbreak preparedness, establishment of national and provincial Emergency Operations Centers (EOCs), and emergency management trainings for MOH staff.

## Health Systems Strengthening

CDC supports the MOH to establish innovative and robust electronic health information systems to prevent, detect, treat, and report cases of HIV, TB, and other diseases. To increase understanding of HIV transmission, program performance, and individual health outcomes, Rwanda used data from multiple electronic systems to establish a case-based surveillance system (CBS) to identify patients during clinic visits and link health records from multiple visits and across health facilities. A digital platform for CBS is currently being tested before deployment to health facilities. Investments in electronic health information systems contribute to:

- Enhanced quality and availability of timely data for clinical decisions and evidence-based programs and policies
- Enhanced data analysis and use of strategic information
- Mentorship and continuous quality improvement that strengthens health services and programs

## Laboratory Capacity

CDC supports enhanced laboratory infrastructure and workforce development. CDC also promotes local expertise in continuous quality improvement (CQI) and helps increase testing capacity to quickly deliver high-quality services. Specific to HIV, CDC works with Rwanda's National Reference Laboratory (NRL) to coordinate the testing network and strengthen key laboratory functions including:

- Sample referral, diagnostics, and electronic information systems
- Quality management systems and external quality assurance programs
- Workforce capacity strengthening
- Investigation and surveillance of recent HIV infection and other disease outbreaks
- Operational research, surveys, and evaluations of new testing technologies

## Field Epidemiology Training Program

With CDC support, the Rwanda Field Epidemiology Training Program (RFETP) trains local epidemiologists and public health leaders to use public health surveillance data to address priority public health challenges and respond to emergencies. In 2009, CDC began

supporting RFETP by conducting needs assessments and trainings in disease surveillance and outbreak response. CDC expanded support in 2010 to include RFETP-Advanced, a two-year course that awards a master's degree course in applied epidemiology and laboratory management. An RFETP-Frontline was established in 2020.

## COVID-19

The first case of COVID-19 was confirmed in Rwanda in March 2020. Since the pandemic was declared, CDC has provided technical and financial support to Rwanda partners for emergency management, disease surveillance, laboratory diagnostics, trainings and workforce development, outbreak response, clinical care, and vaccination. Previous CDC and MOH partnership and investments related to PEPFAR, Ebola, global health security, and laboratory systems were critical to Rwanda's COVID-19 response. RFETP graduates are instrumental to the country's COVID-19 response as they conduct case investigations and contact tracing, monitor home-based care, implement randomized testing events, and respond to outbreaks.

## HIV and Tuberculosis (TB)

HIV and TB are two of the world's leading causes of death. HIV and TB are interconnected, with TB ranked as the leading cause of death for people living with HIV. Through PEPFAR, CDC works with Rwanda's MOH to:

- Strengthen clinical HIV prevention and treatment services, such as counseling, testing, distribution of self-test kits, voluntary medical male circumcision, and prevention of mother-to-child transmission
- Support interventions such as pre-exposure prophylaxis (PrEP) among focus populations
- Scale-up of antiretroviral treatment (ART)
- Integrate TB and HIV services at MOH testing and treatment facilities
- Support TB and HIV informatics, surveillance, monitoring and evaluation, and population-based impact assessment surveys

## Malaria

Malaria is a leading cause of death and disease in many countries, and young children and pregnant women are among the most affected populations. In 2007, CDC began co-implementing malaria prevention and control activities through the U.S. President's Malaria Initiative (PMI). CDC's PMI activities support the Rwanda MOH's National Malaria Control Program to:

- Provide long-lasting insecticide-treated nets, indoor residual spray, and antimalarial medication
- Prevent malaria in pregnancy
- Enhance malaria diagnostics, case management, and disease surveillance
- Monitor and evaluate malaria-related activities to inform decision-making



### CDC STAFF

7 U.S. Assignees  
33 Locally Employed



### AT A GLANCE

Population: > 13.2 million  
Per capita income: \$2,160  
Life expectancy: F 72 / M 67 years  
Infant mortality rate: 33/1,000 live births

Sources:  
World Bank 2021, Rwanda;  
Population Reference Bureau 2021, Rwanda



### TOP 10 CAUSES OF DEATH

1. Lower respiratory infections
2. Neonatal disorders
3. Stroke
4. Tuberculosis
5. Ischemic heart disease
6. Diarrheal diseases
7. Malaria
8. HIV/AIDS
9. Cirrhosis
10. Road injuries

Source:  
GBD Compare 2019, Rwanda

For more country information  
[www.cdc.gov/globalhealth/countries/rwanda/](http://www.cdc.gov/globalhealth/countries/rwanda/)

